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Metal evaporation coating system and process

This document describes this system and process.

Go to the Sensorica Technical Education for more learning experiences

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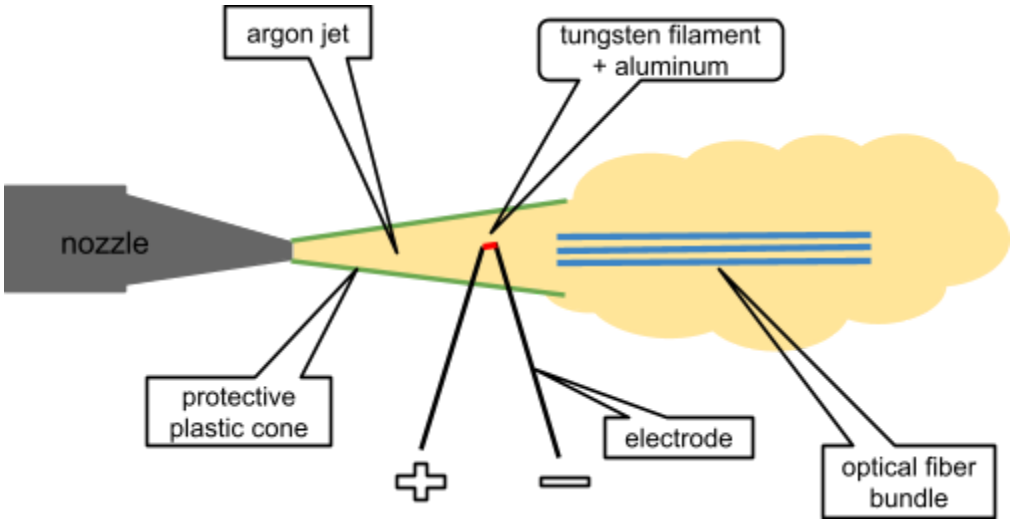
Contents

Concept layout

This is a metal evaporation system **without a vacuum chamber**. We use an argon jet to replace the air around the filament and the optical fiber bundle. We believe this is possible because the area to be coated is very small, only a few mm^3.



Relevance

Metal coating will be used for the joint-type sensor and for the evanescent wave leak sensor. SENSORICA members can also offer coating services in exchange of revenue. See document describing this service.

Parts and cost evaluation

Open document

Other alternatives

Homemade metal evaporation coating under high vacuum video
Chemical silver optical fiber coating, from Chemical silver coating video

History

This idea was proposed by Tibi. It is based on his experience in metal surface laser processing using noble gasses to avoid oxidation.

Comments

See our efforts for Chemical silver optical fiber coating